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UNITED STATES OF AMERICA FEDERAL AVIATION AGENCY WASHINGTON, D.C.

Civil Air Regulations Amendment 41-40

Effective: January 2, 1962 Issued: November 27, 1961

[Reg. Docket No. 152; Amdt. 41-40]

PART 41—CERTIFICATION AND OP-ERATION RULES FOR SCHEDULED AIR CARRIER OPERATIONS OUTSIDE THE CONTINENTAL LIMITS OF THE UNITED STATES

## Carriage of Cargo in Passenger Compartments

The currently effective provisions of Part 41 of the Civil Air Regulations do not provide for the carriage of cargo in the passenger compartment of an air carrier aircraft. However, the operations specifications issued to the air carriers certificated to operate under this part do authorize such carriage, subject to certain restrictions. They provide in part that cargo shall not be carried aft of scated passengers. The intent of this restriction was to safeguard passengers from any possible injury which could be caused by the shifting forward of cargo in the event the aircraft was involved in a survivable crash involving high deceleration forces. The present authorization does not recognize that this desired safeguard could be accom-plished equally well by the incorporation of suitable methods of cargo stowage designed to prevent the shifting of cargo in accidents of this nature.

As a result of a request from the air carrier industry to permit the carriage of cargo in the passenger compartment in cargo bins specifically designed for this purpose, the Federal Aviation Agency issued a notice of proposed rule making which was published in the Feb-ERAL REGISTER (24 F.R. 8302) and circulated as Civil Air Regulations Draft Release No. 59-15 dated October 6, 1959. and titled "Carriage of Cargo in Passenger Compartments." This notice proposed to amend Parts 40, 41, and 42 of the Civil Air Regulations to authorize the carriage of cargo in the passenger' compartment without regard to its location with respect to seated passengers, provided:

(a) The cargo is carried in approved bins which meet the strength and other safety provisions applicable to cargo and passenger compartments prescribed in Part 4b or other airworthiness part under which the aircraft is type certificated, and

(b) The combined weight of the cargo and the approved bin or compartment does not exceed 85 percent of the load used in determining the design conditions for the structure (bin) involved.

It was also proposed in Draft Release 59–15 to continue the authorization to carry cargo forward of seated passengers in the passenger compartment under practically the same provisions as are currently in effect. However, one additional requirement was proposed to be incorporated into the current provision. This requirement was that cargo not carried in approved containers or compartments must be secured by tiedowns possessing sufficient strength to eliminate the possibility of shifting under emergency landing conditions.

The comments received in response to the draft release were for the most part favorable and they reflected endorsement of the principles of the proposal. However, definite opposition was expressed in the comments with regard to the requirement that tiedown for cargo not carried in approved bins or compartments shall possess sufficient strength to withstand the inertia forces of an emergency landing condition. It was contended that to modify the existing authorization by the addition of this requirement would prevent an operational practice which has been utilized for a number of years without adversely affecting safety. Therefore, in view of these comments, and since it was not the intent of the proposal to materially change the existing authorization but only to provide additional means of safely carrying cargo in the passenger compartment, the final rule does not contain this requirement.

It will be noted that the final rule sets forth specific minimum requirements which a cargo bin must meet to be "approved" by a representative of the Administrator. Draft Release 59-15 contained notice of the Federal Aviation Agency's intention to require the use of "approved" cargo bins but did not specify the exact requirements for the "approval." The substance of the proposed rule on cargo bin specifications provided that the cargo bin would be required to meet the strength and other safety provisions of Part 4b or other appropriate part under which the aircraft is type certificated, and that the bin would be considered as an item of mass for inertia force computations. After further study of these provisions it has been deter-

mined that the incorporation into the rule of specific minimum requirements for cargo bins would provide guidance to the industry and eliminate the need for additional directives by the Federal Aviation Agency on this subject. Accordingly, the final rule specifies the minimum requirements which such cargo bins must meet.

Interested persons have been afforded an opportunity to participate in the making of this regulation (24 F.R. 8302), and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, Part 41 of the Civil Air Regulations (14 CFR Part 41, as amended) is hereby amended by adding a new § 41.136 to read as follows, effective January 2, 1962:

## § 41.136 Carriage of cargo in passenger compartments.

Cargo shall not be carried in the passenger compartment except as provided in either paragraph (a) or (b) of this section.

- (a) Cargo carried aft of the foremost seated passengers shall be carried in an approved cargo bin. Approved cargo bins shall meet the minimum requirements of subparagraphs (1) through (7) of this paragraph.
- (1) The cargo bin shall be constructed to withstand the ultimate inertia forces (ultimate load forces if appropriate) applicable to the construction of the passenger seats in the airplane in which the bins are to be installed multiplied by a factor of 1.15. The combined weight of the bin and the maximum weight of cargo to be carried in the bin shall be used to determine this strength.
- (2) Each bin shall be placarded with the maximum weight permitted to be carried in the bin.
- (3) Cargo bins shall be constructed no higher than the height of the passenger seats installed on the aircraft in which the bin is to be used.
- (4) Each bin shall be secured to the seat tracks or otherwise attached to the floor structure in such a manner that its attachments will withstand the same forces that the attachments of the pas-

senger seats in the airplane are required to withstand.

- (5) Each bin shall be located in the passenger compartment so as not to restrict access to or use of any emergency or regular exit, or restrict the use of the aisle in the passenger compartment.
- (6) Each bin shall be fully enclosed and constructed of material which is at least flame resistant.
- (7) Each bin shall be provided with suitable safeguards within the bin to prevent the cargo from being displaced under emergency landing conditions.
  (b) Cargo carried forward of the fore-
- (b) Cargo carried forward of the foremost scated passengers shall be carried either in approved cargo bins as specified in paragraph (a) of this section, or in accordance with the following requirements:
- (1) It shall be properly secured by means of safety belts or other tie-downs possessing sufficient strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions:
- (2) It shall be packaged or covered in a manner to avoid possible injury to passengers:
- (3) It shall not impose any load on seats or floor structure which exceed the structural load limitation for those components;
- (4) It shall not be loaded in any position which restricts the access to or use of any required emergency or regular exit or the use of the alsle in the passenger compartment; and
- (5) It shall not be loaded in any position which obscures the passengers' view of the "seat belt" and "no smoking" signs, unless an auxiliary sign or some other means for proper notification of passengers is provided.

(Secs. 313(a), 601, 604, 605, 72 Stat. 752, 778, 49 U.S.C. 1354(a), 1421, 1424, 1425)

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DAVID D. THOMAS, Acting Administrator.

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